sitting around, which I know is not the case, but if they did and we ordered them and then customers wanted to move over, moving their line to that spare switch port is useless when their service is on the old switch port.

That requires another level of complexity and more work to coordinate not only the work of the on site work force to do the physical work to move the wires to the new port, but it requires a coordination activity with the ILEC's software control center to move the customer's service off of the old switchboard onto the new switchboard.

Thank you.

MS. MATTEY: Okay. I am going to switch the focus a bit.

If the Commission were to conclude that the Recent Change method was legally required, how much time would it take to actually put it in place so that people could actually use it?

MR. LAURIA: A commercial solution can be done in approximately six months.

MS. MATTEY: Okay. I have another general question, which is are there any other technological solutions on the horizon that we should be aware of? I mean, we have heard about several things here. Is there anything else sort of coming down the pike?

MR. FALCONE: The only thing that I am vaguely

aware of through some research is that there is some work toward what I will call a mechanized MDF where the entire main distribution frame would be replaced by what I will call there is a device called digital cross connection systems today where somebody can remotely move digital facilities around and map digital facilities.

There is work afoot to develop something similar to that for analog facilities where the entire MDF would be wired to this device and then anybody could have access to it hypothetically and electronically map any loop to any switch port, but that is at least two or three years ago.

MS. MATTEY: Okay. I would like to turn things over to the audience now. If there is anyone in the audience that has a question, we have someone with a mike. I see a hand over back that way.

MR. JENKINS: Good morning. My name is Earl Jenkins with SHS Consulting. I have a couple of comments and a question.

The first comment is relative to your last question. I do know that there are products on the market today that offer solid state switching and cross wiring capabilities remotely with testing capabilities also that are available for CLECs that will work in or outside of a cage. Quantum Link, as a matter of fact, has such a product on the market today.

My other comment is directed towards AT&T. It seems as though this application, Recent Change, would work well for migration, but perhaps not as well for CLECs who do not want the entire platform, but maybe just two elements, for example, as opposed to the whole thing.

My third comment, or actually it is a question to Mr. Owens. Have you actually worked with any OSS provider to extend the capability of the SPOT frame so that perhaps remote cross connections and testing can be performed such as what I mentioned with the Quantum Link product?

Thank you.

MR. OWENS: We had a meeting in fact yesterday with this vendor to review their product, so we have that underway.

I think if we had a CLEC that was interested in placing that product in the central office as a SPOT frame, we certainly would work with the CLEC to have that available to them, so we are interested in pursuing those options.

MS. MATTEY: Okay. Where are you going with the mike? I see a question up front, I think.

AUDIENCE MEMBER: Just a quick question to Mr. Kennedy.

This MAC unit, is it deployed extensively in incumbent like networks today? If so, what do they do with it?

MR. KENNEDY: Okay. Good question. The product to date is not what I would call extensively deployed. We have been completing several trial situations with the product; successfully, I might add.

The product is now in a situation for deployment within the Bell Atlantic network in outside plant applications for automatic cross boxes out in the field. It is also deployed in two independent telephone companies for use with remote central office main frame replacements, so the product is again scaleable. It can handle large scale main frames.

The testing, which I did not mention a while ago, does remain in fact intact when the CLEC does put their own dial tone on there. You can still do the mechanized loop testing on the product as well, so it does provide that.

To this date, with all of the things we have been doing with patent coverage and this and that, it is in trials with these companies. We are now moving into a full scale deployment with it, and it is available, as well as the compliancy testing. That has been a big thing. This product is compliant. It is Bell Corp. compliant for use in the central office.

MS. MATTEY: Okay. I think this woman in the third row had her hand up last time.

MS. SUMMER: Yes. Thanks. My name is Teona

Summer. I am with the Georgia Public Service Commission. I have a question mainly for AT&T and U.S. West, but anybody else, I guess, could jump in.

From a purely technical engineering standpoint, not getting into the legal or whatever, but purely technical engineering, is there any difference between the Recent Change capability approach, or, for that matter, any other approach other than what the ILECs have been proposing, any difference between that and resale? Again, just a purely technical engineering standpoint.

MR. FALCONE: Yes, very, very different in that resale -- never mind getting into the differences of what you could do as a service provider using the elements first as resale. I am not even going to go there.

We could talk in the hall at lunch if you would like to do that, but just from a technical difference of recombining elements, what AT&T is proposing is that with Recent Change the ILEC, the incumbent LEC, would actually go in and do a Recent Change to separate the functionality of the customer that wants to change the local service provider's loop from functionality of the switch, so the customer effectively has this service removed or separated.

Then AT&T, or whoever the CLEC is, has to perform a complementary Recent Change to recombine the functionality of that loop with the functionality of the switch, so the

CLEC has to do an activity to combine the elements with recent change, as opposed to resale where we just issue an order and there is a billing change made to show us as the carrier of record.

MR. OWENS: Let me respond to that. Not surprisingly, I do not think the difference is as great as has just been described.

The Recent Change really does not disconnect the loop from the line side loop. It is still there. It is still physically attached to that port. The only thing that the Recent Change has done is it has deactivated the port. It has not disconnected it. AT&T cannot, for example, combine that port with a different loop through Recent Change. It is still hard wired through the jumpers that are on the cosmic frame. They stay intact.

Frankly, a similar type of operation has to occur with resale so that we can, when we transfer the customer from U.S. West, from a U.S. West end user, to an AT&T end user. We need to do similar changes so that the appropriate billing records are generated for AT&T's use to bill its end user. In my view, the change or the distinction between the two is minuscule at best.

MS. MATTEY: I thought I saw a hand in the fourth row.

MR. DAVIS: Don Davis with Intermedia. A question

for Mr. Falcone, and it follows up trying to better understand Recent Change.

Can Recent Change be utilized where there is no existing customer loops going to an area in terms of a new service address? Can it also be utilized when it is changing the conditioning of the loop?

MR. FALCONE: Let me take them one at a time. I am not sure if I understand. Let me take the first one, and then I might have to ask a follow up question to answer the second one.

Two things have to happen to make a loop functional or provide service to a customer. The physical work needs to be done, so in your case if I call Bell Atlantic, and I am picking on Bell Atlantic because they are my service provider. If I call Bell Atlantic and ask them for a second line, chances are there is no loop connected to the switch for my second line.

Bell Atlantic would have to make that connection, but nothing is functional. That loop is not functional -- I do not get dial tone; people cannot call me -- until somebody goes in and performs a Recent Change to combine the functionality of the loop to the functionality of the switch.

What AT&T is proposing for cases of second lines or where there is not anything already connected that the

incumbent LEC, because the incumbent LECs have made it very clear they will not allow us that access to their central offices.

The incumbent LEC will make the physical connection, for which we will pay them the cost base rates to do that. We will compensate them for that, and then the CLEC, through the appropriate firewall, would perform the Recent Change to combine the functionality of the switch with the functionality of the port and, therefore, provide service.

MR. DAVIS: So it is really a two step process from the physical work that Bell Atlantic would have to do plus the Recent Change?

MR. FALCONE: And that is what they would have to do for themselves, and we are saying that is what we would like, the mode of operation that we would like to see the CLECs be in.

MR. OWENS: I think your question has illustrated the point very well. The example that was just given would require the incumbent LEC to actually combine the new loop with the new switching port, so again under this proposal it is clear that the incumbent is back in the business of combining elements on behalf of the CLEC in direct contradiction of the Eighth Circuit's finding about what the incumbent's obligations are.

MS. MATTEY: Okay. I have time for one more question. I saw a hand in the front row.

MR. SRINIVASA: Hi. My name is Nara Srinivasa. I am with the Texas Public Utility Commission. My question is to Mr. Bob Falcone.

It is more technical towards the Recent Change that if you invoke the Recent Change feature of the switch, in those states where there is no requirement for warm dial tone essentially there will not be any current flow to the loop. Is that correct?

MR. FALCONE: That is correct.

MR. SRINIVASA: That means there is a semi-conductor or a diode, some sort of electronic device, that is in a non-conducting state. Is that correct?

MR. FALCONE: The Recent Change process in turning off that customers' line, the switch is instructed not to put dial tone and not to put current out on that customer's loop.

MR. SRINIVASA: So the Eighth Circuit did not say that the separation has to be mechanical? It could be electronic? Is that your argument?

MR. FALCONE: From a layperson's reading, I did not read anywhere in the Eighth Circuit Order where they said that things had to be physically separated.

What AT&T is proposing is that electronically

through the Recent Change process the loop could be separated from the port or from the switch as effectively as if they were physically disconnected on the cross connection frame except you are electronically separating the functionalities in the switch.

MR. SRINIVASA: So the physics in the semi-conductor could be physical functionally?

MR. FALCONE: Yes.

MR. SRINIVASA: Thank you.

MS. MATTEY: Okay. I would like to thank all of the panelists. This has been very informative.

(Panel excused.)

MS. MATTEY: We will take a brief break, and we will resume at 11:00 a.m. sharp. Thanks.

(Whereupon, a short recess was taken.)

MS. MATTEY: Thank you, everyone, for taking your seat.

As everyone knows, a number of the Bell companies argue that collocation is the only method for combining network elements allowed under the Act. They also assert that their collocation offerings meet Section 271's requirement that they provide non-discriminatory access to network elements in a manner that allows new entrants to combine them.

New entrants, on the other hand, have contended

that requiring collocation to combined network elements is in fact discriminatory because it is not commercially scaleable, and it imposes excessive costs and delays that the Bell companies do not face.

This morning, two Bell companies will present the affirmative case for the proposition that collocation satisfies the statutory non-discrimination standard for combining network elements. Representing the Bell company position this morning are Dan Poole from Southwestern Bell Telephone Company, and John Lenahan from Ameritech.

Representing the opposing view are two new entrants, Rocky Unruh on behalf of LCI and Gary Ball from WorldCom.

Let's start off with Mr. Poole, please.

MR. POOLE: Thank you. My name is Daniel L. Poole. I happen to work for Southwestern Bell Telephone Company, who is obviously a subsidiary of SBC.

The SBC telephone operating companies, which are Southwestern Bell, Pacific Bell and Nevada Bell, offer, in addition to the traditional physical and virtual collocation, five additional methods by which we offer up to CLECs for combining UNEs.

While the combination of the local loop and switch port receives most of the attention, there are a lot of other combinations that must be accommodated by any method

of access that is provided to the CLECs. These include, among others, loops, ports, dedicated transport and local switching.

Two distinct combining scenarios must be addressed. In one scenario, the CLEC desires to combine its own equipment with UNEs obtained from an incumbent LEC. In the second scenario, the CLEC desires to combine UNEs obtained from the incumbent LEC without utilizing any of its additional equipment.

For CLECs that want to utilize their own switch and/or transmission equipment, Southwestern Bell offers both physical and virtual collocation, physical collocation provided in a secure area separated from the central office equipment of the SBC's operating offices.

Thus far, SBC has provided nearly 400 collocation spaces in its seven state operating territory. The CLEC technicians have access to these arrangements on a 24 hour/ seven day basis, and in some of these cases the CLEC can specify or designate specific cable pairs to be used to extend use to the collocation space. This allows the CLEC to establish in advance physical connections needed to combine the use.

CLECs combine UNEs using cross connects or jumper wires, as has been discussed this morning, which are simply short wires that establish an electrical connection. These

cross connections are used by the CLEC that the CLECs will use to combine UNEs or the same cross connects or jumpers that operating companies use thousands of times every day to provide our retail services.

Where space or physical collocation is not available or upon request of a CLEC, we will do virtual collocation.

With respect to the five options that the SBC is going to offer to CLECs for purposes of combining UNEs, I will give you a brief description. The first one is where a virtual or physically collocated CLEC would request a separate POT for purposes of providing UNEs. That POT would be in a physically collocated cage, and under the scenario the CLEC has the option to dedicate the tie pair going back to the Southwestern Bell office and pre-wire those jumper wires so that the UNE combinations can be done ahead of time in order to accommodate fast conversions.

Second, if the CLEC is physically collocated, Southwestern Bell will extend the UNEs to a shared CLEC POT frame that is in the protected collocated area, but not necessarily in an individual collocator's cage. In this scenario, that will be a common POT available to each of the CLECs that are collocated here, and that particular arrangement Southwestern Bell pays for the POT frames. Southwestern Bell pays for the tie cable and recuperates the

investment on a per pay basis.

Third, Southwestern Bell will extend UNEs that require cross connects to the frame located in the common space within the central office that is not within the common collocated area. This arrangement also requires no expenditures or up front investment by the CLECs.

Fourth, we will take this point of presence or this POT, and we will even put it outside the office if there is no room in the central office. This arrangement would be no different than Southwestern Bell's outside plant where hundreds of cross connects are done each day.

Lastly, we would allow extension of the UNEs not controlled by Southwestern Bell. Southwestern Bell will allow the CLEC to purchase a cable, bring it into our CO, take it to wherever they see fit, put their own POT frame in there and make their own cross connects. In that arrangement, they can pre-wire their cross connects, and they can assign the particular cables that Southwestern Bell needs to cross connect the ports and the loops to.

Combining UNEs and the collocation spaces or POT frames I have just described will not result in service degradation because it is the same thing that we provide our customers every day. Southwestern Bell offers CLECs more than a single, non-discriminatory method of access to UNEs that is necessary to give CLECs a meaningful opportunity to

compete.

With respect to Recent Change, I would kind of like to make a couple of comments. AT&T made the statement that Recent Change will allow the CLECs to make changes just as the IXCs do. I would point out that the IXCs do not make any Recent Changes with respect to changing customers. They inform the ILECs, and the ILECs actually lead our Recent Change function. The IXCs do not have access to our Recent Change database.

It is easy for some of the collocators to say that security is a red herring with respect to Recent Change. From an engineering standpoint and a maintenance standpoint, I can say that that is easy to say because it is not their equipment.

MCI made the point about coming up with innovative services. With respect to the Recent Change activity, the only thing that you are going to be able to do in that scenario is take an existing loop, an existing port that is already combined and Southwestern Bell is providing all the service on today, and take that and give it to a customer.

You cannot change any features. You cannot change any services on that loop. The end user is going to end up with the same service that he started with. There is no innovative services being brought into this context there.

That is all. Thank you.

MS. MATTEY: Thank you.

Mr. Lenahan?

MR. LENAHAN: Thank you. My name is John Lenahan with Ameritech. Based on the liveliness of the panel just before me, I think I would like to talk about Recent Change, but --

MS. MATTEY: You cannot change the script, John.

MR. LENAHAN: -- I would like to talk about the two things, the facts about collocation in the Ameritech region and then our legal position on this important issue.

First let me talk about the facts. We have legally binding terms and conditions that describe in detail all of the particulars in terms of access to collocation space, etc. These are in approved contracts, and they are on our Web page, TC.NET. The Web page describes all of the procedures and processes that need to take place in order to order physical collocation or virtual and then to order elements.

With respect to some of the terms, the important ones really are interval and price. Interval. We have commitments to from beginning to end to provision collocation in about 12 to 14 weeks. That varies obviously depending on the office, but that is a pretty good rule of thumb.

In terms of processing, we processed last year

over 260 collocation orders. This year we have processed 200 orders to date. I am not aware of any significant problems in terms of delay or us not meeting our interval commitment.

In terms of price, another very important term, the price obviously depends on the type of collocation requested. Physical collocation in four states is about $50,000 with a cage and with the equipment provided by us. It is about half that price in Michigan. Virtual collocation is about $10,000 and about $6,000 in Michigan.

Now, to put the price in context, it sounds like a lot of money, but using pretty reasonable business assumptions even physical collocation is about $1 per month per line to the requesting carrier, assuming they collocate in an office of about 30,000 to 35,000 lines, which is a pretty standard size in our region.

In terms of are these terms reasonable and is the price too high, one of the proof of the pudding would be how much is in place? In terms of deployment, we have working collocation in 218 out of our 1,100 serving wire centers. That is about 19 percent of the centers, but those 19 centers address 48 percent of our total 20.5 million lines.

Put another way, about 40 percent of our residential lines are served by an office that has working collocation in it today, and 60 percent of our business

lines are served by an office with working collocation, so we think collocation in the Ameritech region is well on its way in many areas in place and in operation.

Let me turn to the second point. What is our legal position? Let me emphasize that my comments today represent what we believe the Act requires. I am not representing a business position on whether or not we would agree to a different method of access That is for negotiation. I am focusing on what did Congress require in the Telecom Act of 1996.

Our position is that collocation is the only authorized method to access unbundled network elements if that access takes place in the incumbent's central office. Probably the biggest point of contention is well, John, is it not true that 251(c)(3) says access "at any technically feasible point"? (c)(3) does say that, but that is in context to where you may get a network element. Those phrases modify the element itself, the beginning and ending point of the element itself. They do not modify or describe the method of access.

As the Commission held in the first report and Order, access is provided to a network element through connections, jumper cables, tie cables. In fact, the definition of switching includes a connection from the switch to the main distribution frame.

The method of access depends on where you want to obtain it. If you want to obtain access in your premise or someplace between our premise and your premise if you are a CLEC, there is lots of opportunities. If you want access in the incumbent's central office, there is only one authorized, and that is collocation.

Congress specifically and expressly said in 251(c)(6) that collocation is the method of obtaining access to network elements if it takes place in the incumbent's premises, and if there is not adequate space virtual collocation is required.

Now, the reason that that is the position is really because, and it is kind of a repeat of what we heard earlier. It gets to the nature of obtaining access to an unbundled network element.

It is a physical concept, and, despite what a layperson might think about that, the FCC and AT&T is arguing right as we speak to the United States Supreme Court that what the Eighth Circuit held was (c)(3) requires physically unbundled network elements and requires that the requesting carrier physically combine the network elements.

Now, AT&T and the FCC is claiming that is wrong; that is an improper interpretation, but the fact of the matter is that is what the law is as we speak. That is what the Eighth Circuit held, and so if you accept the fact that

access to a network element is a physical thing and if the physical combination takes place in the central office, based on Bell Atlantic v. FCC, the only physical occupation that is permitted to be required, again not what could be negotiated but what is required, is limited. It must be contained in the statute.

At the time of Bell Atlantic, there was no statutory authority and so the D.C. Circuit held that the FCC had no right to require collocation. The Congress changed that, and in (c)(6) they provided two methods to provide access to network elements in the central office, and those are the only two methods that are authorized. If other forms of physical occupation are required, that would constitute an unauthorized taking. That would be unconstitutional.

The last thing I would like to talk about in this forum is in the context of 271 discussions and future 271 filings. What does a BOC need to demonstrate to show that the collocation they offer permits a requesting carrier to combine the network elements in a way that enables, and here is the key point. That enables the requesting carrier to design and construct their alternate network so that they can provide competing services.

The purpose of network elements is not another flavor of obtaining access to the existing in place network.

Mr. Owens I think made that point pretty clear on the panel before us. That is called resale.

The purpose of network elements is to create a competing network, and what we would need to demonstrate that we are providing collocation that permits a new entrant to create a competing network is basically five things. Are we providing collocation in a timely way subject to legally binding terms and conditions?

Are we providing the network elements subject to legally binding terms and conditions? Can we provide those network elements to the physical collocation space in a manner that permits the requesting carrier to combine them, and that gets to volume and how many can we do in a day, etc., etc., and when the cross connect or tie cable or jumper cable gets there, is there any loss of quality, etc., etc., and then when CLEC does the combination, assuming they do it correctly, does that enable them to provide competing service? We would need to demonstrate that.

Now, in terms of how do we demonstrate that, basically there are two approaches. We have provided to date over 80,000 unbundled loops. We have provided over 100,000 interoffice transport facilities. We have provided over 800 separate, different collocation arrangements.

We think our actual deployment demonstrates that we can provide this in a way that permits people to use it,

but in addition to that, since nobody has bought these network elements and combined them themselves, we have conducted an internal demonstration to prove the concept, which we have on a videotape, and we will put that in the record of this proceeding, which shows that under collocation as we have provisioned it a requesting carrier, if they choose, can combine all of the network elements and provide a competing network that provides a competing service.

MS. MATTEY: Thank you.

Mr. Unruh?

MR. UNRUH: Thank you. I am Rocky Unruh, outside counsel for LCI. Because I am an attorney, I am going to limit my comments this morning principally to the legal issues and perhaps respond to some of the points that Mr. Lenahan made.

To the extent I have any time left over, I am going to cede that to Mr. Salemme if he is still here so he can talk some more about the horrors of collocation that he started into earlier this morning.

First of all, let me respond to the first question that the Commission posed to this panel, and that is is collocation the only method for access to UNEs to combine UNEs that is authorized by the statute? The answer to that question is absolutely not.

Now, I would agree with Mr. Lenahan that 251(c)(6) imposes a duty on the ILECs to provide collocation, both virtual and physical, to CLECs. However, that is a separate duty from the duty imposed in Section 251(c)(3), which obligates the ILEC to provide access UNEs and to provide access so that we can combine UNEs at any technically feasible point.

Now, Mr. Lenahan raised the distinction between point and method. I think if you turn to the regulations that the Commission enacted implementing the statute, they put a definition of what is technically feasible and the technically feasible methods for CLECs to access UNEs and interconnection.

In Regulation 51.5, which is the definition of technically feasible, and 51.321(b), the Commission said very clearly that technically feasible methods of access to UNEs includes, but is not limited to, collocation and physical collocation, so I think both in the statute itself, 251(c)(3), and in the regulations implementing that statute it was made clear that the methods of access are not limited to collocation, but they are obligated to provide us access at any technically feasible point.

The point you choose to access the UNEs is indeed going to determine the method that you combine the UNEs. We heard a lot of discussion in the earlier panel today about

Recent Change. With Recent Change you would be accessing the UNEs at the OSS.

There are different points of accessing the ILEC's networks, as Mr. Lenahan mentioned, and for Recent Change purposes the point of access is in the incumbent's OSS. The method of combining the UNEs then would be through the implementation of the Recent Change process. I think if Congress had intended to limit access to UNEs only to collocation, it could have easily done so in 251(c)(3). It did not. It provided a much broader means of access.

The second legal question that the Commission directed to this panel was is collocation consistent with the Eighth Circuit holding that a competing provider may provide service entirely through the use of UNEs.

The answer to that question is again absolutely not because collocation, however it is described or whatever flavor or version there is of it, a CLEC is required to deploy some facilities to implement that, and that is indeed contrary or is inconsistent with the clear holding in the Eighth Circuit, and several state commissions that have considered this issue have so held.

They have concurred that requiring collocation, whether it is in a SPOT frame -- I think the Iowa Commission recently rejected U.S. West's SPOT frame -- whether it is in one of the five versions that SBC has for collocation. All

of these require the CLECs to deploy some network facilities in order to accomplish the access in combination of the UNEs.

Those are the key legal issues. Collocation is not the only means authorized for combining UNEs. The CLECs themselves, under 251(c)(3), are entitled to make a request, and the ILECs are obligated to honor that request as long as the request is at any technically feasible point.

Secondly, requiring collocation or some flavor or version of collocation is inconsistent with the Eighth Circuit.

Thank you.

MS. MATTEY: Thank you.

Mr. Ball?

MR. BALL: Thank you. I am here to present WorldCom's view on the issue of collocation and recombining elements.

From the perspective of WorldCom, who is not only an interexchange carrier, but also the largest facilities based carrier in the country, I would like to start off clarifying that WorldCom is not anti-collocation. We think collocation is a critical component of promoting local competition. We have hundreds of collocation arrangements already in place, and we think they are very valuable as a means of connecting our network to components of the Bell